

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte ROBERT FRIEBE, WILHELM WEBER and KARL-HEINZ SOCKEL

Appeal No. 2005-1095
Application No. 08/894,824

ON BRIEF

MAILED

MAY 05 2005

PAT. & TM. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Before PAK, OWENS and WALTZ, Administrative Patent Judges.
PAK, Administrative Patent Judge.

DECISION ON APPEAL

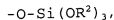
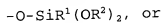
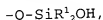
This is a decision on appeal from the examiner's final rejection of claims 1 through 3, 6, 8 through 10 and 13. Claim 4, the only other claim in the above-identified application, is no longer rejected and is, therefore, no longer the subject of this appeal. See the Answer, page 2. Claim 4 is objected to as being dependent upon a rejected base claim, but indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. *Id.*

According to appellants (Brief, page 3), "[t]he appealed claims stand or fall together." Therefore, for purposes of this

appeal, we select claim 1 from all the claims on appeal and decide the propriety of the examiner's rejection below based on this claim alone in accordance with 37 CFR § 1.192(c)(7)(2003) and 37 CFR § 41.37(c)(1)(vii)(2004). Claim 1 is reproduced below.

1. Polysiloxane compositions which cross-link by condensation and which comprise:

- a) at least one cross-linkable polysiloxane comprising as a reactive terminal group at least one of the following groups:

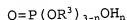


wherein

R¹ denotes optionally substituted C₁-C₈-alkyl, C₆-C₁₄-aryl or C₂-C₈-alkenyl groups, and

R² denotes optionally substituted linear or branched C₁-C₈-alkyl or C₂-C₈-alkoxyalkyl groups, and R¹ and R² can be the same or different within the molecule,

- b) at least one basic filler and optionally other fillers,
c) at least one phosphorus compound selected from the group consisting of i) orthophosphoric acid esters of the following formula:



in which

n denotes 0, 1 or 2, and

R³ denotes an optionally substituted linear or branched C₁-C₃₀-alkyl, C₁-C₃₀-acyl, C₂-C₃₀-alkenyl, C₂-C₃₀-alkoxyalkyl, C₅-C₁₄-cycloalkyl or C₆-C₁₀-aryl group or a triorganosilyl or diorganoalkoxysilyl group, and each R³ can be the same or different within the molecule,

wherein when n denotes 1 or 2, at least one of the substituents R³ is an optionally substituted linear or branched C₁-C₃₀-alkyl, C₁-C₃₀-acyl, C₂-C₃₀-alkenyl, C₂-C₃₀-alkoxyalkyl, C₅-C₁₄-cycloalkyl or C₆-C₁₀-aryl group, and wherein when n denotes 0, at least one of the substituents R³ is a triorganosilyl or diorganoalkoxysilyl radical,

and ii) esters of polyphosphoric acid,

- d) at least one alkoxysilane cross-linking agent selected from the group consisting of tetraethoxysilane, tetra-n-propoxysilane, methyltriethoxysilane, methyltrimethoxysilane, methyltri(2-methoxyethoxy)silane, vinyltrimethoxysilane, vinyltriethoxysilane and partial hydrolyzates thereof
- e) at least one organometallic compound selected from the group consisting of organic titanium compounds and organic tin compounds and
- f) optionally other auxiliary substances selected from the group consisting of plasticizers, bonding agents, pigments and fungicides.

The prior art references relied upon by the examiner are:

Sattlegger et al. (Sattlegger)	4,434,283	Feb. 28, 1984
Eck et al. (Eck)	5,063,087	Nov. 5, 1991

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Claims 1 through 3, 6, 8 through 10 and 13 stand rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Eck and Sattlegger.¹

We have carefully considered the entire record in light of the opposing positions taken by the appellants and by the examiner. Having done so, we shall affirm the aforementioned rejection for the factual findings and conclusions set forth in the Answer and below.

The appellants do not dispute the examiner's finding that Eck in Example 12 prepares a polysiloxane composition containing "components corresponding to claimed components a), b), c) and e)."

Compare the Answer, pages 2-3, with the Brief in its entirety. The appellants also do not dispute the examiner's finding that Eck in Example 12 employs an oxime crosslinking agent (an oximosilane), rather than an alkoxysilane crosslinking agent defined by claimed component d). Compare the Answer, page 3, including footnote 1, with the Brief in its entirety.

The initial question is, therefore, whether it would have been *prima facie* obvious to employ the alkoxysilane crosslinking agent, in lieu of the oximosilane crosslinking agent, in curing the

¹According to the examiner (Answer, page 2), "[t]he rejection over Schiller et al. in view of Sattlegger et al. has been withdrawn."

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composition of the type described in Eck. On this record, we answer this initial question in the affirmative.

As is apparent from the Brief, the appellants do not challenge the examiner's official notice that "alkoxysilane and oximosilane crosslinking agents are commonly used in the alternative with one another in condensation curable silicone compositions." Compare the Answer, page 3, with the Brief in its entirety. Nor do the appellants challenge the examiner's finding that Sattlegger teaches

a composition that is condensation curable via the reaction between terminal SiOH groups and a silane crosslinking agent. This is the same type of cure mechanism used in the composition shown by Eck et al. As can be seen [from] column 2, lines 32 to 42, [of Sattlegger,] the reactive group X can be either alkoxy or an oxime group. That is, Sattlegger et al. teach that the alkoxy and oxime condensable groups can be used in an equivalent manner to form a curable silicon composition . . . the alkoxy and oxime groups are considered to be functional equivalents. [Compare the Answer, page 3, with the Brief in its entirety.]

Moreover, we note that both Eck and Sattlegger are directed to improving the adhesion property of polysiloxane compositions.

Under these circumstances, notwithstanding the appellants' arguments to the contrary, we concur with the examiner that one of ordinary skill in the art would have been led to use either

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alkoxysilane or oximosilane as a cross-linking agent in curing the polysiloxane composition of the type described in Eck, with a **reasonable expectation of successfully** curing the polysiloxane composition in the same or substantially the same manner. It follows that the examiner has established a *prima facie* case of obviousness within the meaning of 35 U.S.C. § 103.

The appellants' principal argument is that none of the applied prior art references recognizes that the claimed polysiloxane composition imparts improved properties not reasonably expected by one of ordinary skill in the art, thereby rebutting any *prima facie* case established by the examiner. See the Brief, pages 4-6. In support of this argument, the appellants refer to Table 1 at page 12 of the specification and Examples 10 and 11, Table III, at column 9, lines 1-12, of Eck. See the Brief, page 4.

In order for a showing of "unexpected results" to be probative evidence of nonobviousness, it falls upon the appellants to at least establish that the showing relied upon by the appellants is directed to a comparison between the claimed invention and the closest prior art and is commensurate in scope with the claims on appeal. See *In re Baxter Travenol Labs.*, 952 F.2d 388, 392, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991) ("[W]hen unexpected results are

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used as evidence of nonobviousness, the results must be shown to be unexpected compared with the closest prior art."); *In re Kulling*, 897 F.2d 1147, 1149, 14 USPQ2d 1056, 1058 (Fed. Cir. 1990) ("'[O]bjective evidence of nonobviousness must be commensurate in scope with the claims'") (quoting *In re Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972)); *In re Johnson*, 747 F.2d 1456, 1461, 223 USPQ 1260, 1263-64 (Fed. Cir. 1984) ("'[A]n applicant relying on comparative tests to rebut a *prima facie* case of obviousness must compare his claimed invention to the closest prior art'") (quoting *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984)); *In re Dill*, 604 F.2d 1356, 1361, 202 USPQ 805, 808 (CCPA 1979) ("The evidence presented to rebut a *prima facie* case of obviousness must be commensurate in scope with the claims to which it pertains"). On this record, however, the appellants here have not compared the claimed invention with the closest prior art. In this regard, we concur with the examiner that the closest prior art is a polysiloxane composition formed in Example 12 of Eck for the reasons set forth at pages 4 and 5 of the Answer.

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Moreover, we note that while the showing in the specification is limited to eight polysiloxane compositions having specific proportions of specific compounds, the claims on appeal embrace thousands, possibly millions, of polysiloxane compositions containing any proportions of various combinations of multifarious compounds. The appellants have not explained, and it is not at all apparent to us, just how and why the showing referred to is commensurate in scope with the claims on appeal.

Thus, having considered all of the arguments and evidence advanced by both the examiner and the appellants, we determine that the evidence of obviousness, on balance, outweighs the evidence of nonobviousness proffered by the appellants. Hence, we share the examiner's view that the claimed subject matter as a whole would have been obvious to one of ordinary skill in the art in view of the applied prior art references. Accordingly, we affirm the examiner's decision rejecting the claims on appeal under 35 U.S.C.

§ 103.

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For all of the foregoing reasons and the reasons set forth in the Answer, the decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED


CHUNG K. PAK

CHUNG K. PAK
Administrative Patent Judge

TERRY J. OWENS
TERRY J. OWENS

Administrative Patent Judge

BOARD OF PATENT
APPEALS
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